

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-035874  
 (43)Date of publication of application : 07.02.2003

(51)Int.Cl.

G02B 26/08  
B81B 3/00

(21)Application number : 2001-222069

(71)Applicant : NIKON CORP

(22)Date of filing : 23.07.2001

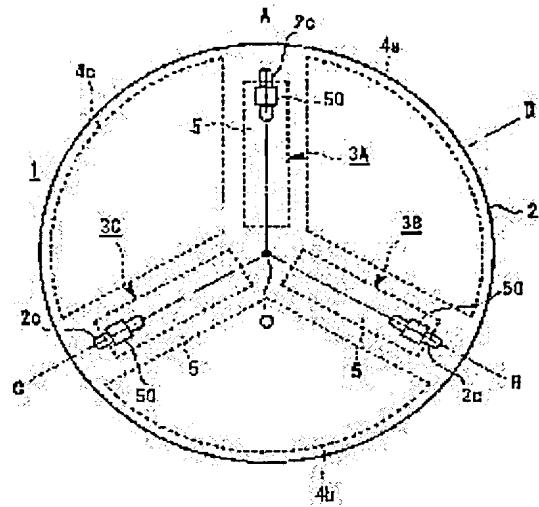
(72)Inventor : ISHIZUYA TORU

## (54) THIN-FILM SLIDE CONNECTING MECHANISM AND ITS MANUFACTURING METHOD, AND MIRROR DEVICE AND OPTICAL SWITCH USING THE SAME

## (57)Abstract:

PROBLEM TO BE SOLVED: To actualize size reduction and more improved mass-productivity while maintaining superior optical characteristics.

SOLUTION: A mirror device is equipped with a mirror 2 and a support mechanism which elastically supports the mirror 2 over a substrate 1 so that the mirror can slant in an arbitrary direction. The support mechanism has three support parts 3A to 3C which mechanically connect the substrate 1 and mirror 2. The support parts 3A to 3C each have one or more leaf spring part 5 which is composed of one or more layers of thin films. One end part of the leaf spring part 5 is connected to the substrate 1 through a leg part 9. The other end part of the leaf spring part 5 is mechanically connected to the mirror 2 by a thin-film slide connecting mechanism. The connecting mechanism has an oblong hole 2c bored in the mirror 2 and an insertion part 10 which is run through the oblong hole 2c with clearance and fixed to the other end part of the leaf spring part 5.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]







